

TESTIMONY ON WATER RESOURCES
Testimony of Oliver Page

I. Name: Oliver Page, P.G.

II. Purpose:

My testimony addresses groundwater resources issues associated with the Blythe Energy Project, Phase II (BEP II).

III. Qualifications:

I am a licensed professional geologist in the State of California, P.G. 86. I specialize in matters relating to water resources. I hold a B.A. degree from UCLA in Geology and a M.S. degree in Hydrogeology from Colorado State University. I have been with Stetson Engineers, Inc. (Stetson) since 1965 and am presently the CEO/CFO of the firm. I have participated in geologic and hydrologic investigations throughout the Western United States. I specialize in groundwater resource evaluations and water well design and rehabilitation, while still participating in a wide variety of projects. Stetson maintains offices in San Rafael and Covina, California and Mesa, Arizona. Stetson employs a staff that includes approximately 35 engineers, geologists and other professionals. Some of Stetson's principal clients include: San Gabriel Valley Water Company, Valley County Water District, Main San Gabriel Basin Watermaster, North States Resources, Inc., U.S. Department of Justice, City of Chino, Pyramid Lake Paiute Tribe, Upper San Gabriel Water District and Alameda County Flood Control and Conservation District.

I have participated in several investigations in the region including: evaluation of potential sources of emergency water supply for a possible stream-electric power plant on the Mohave River; review of groundwater conditions in Painte Valley; determination of possible sources of industrial water supply in the lower Colorado River area; determination of available water supply in Chuckwalla basin and development of a groundwater supply on the Fort Yuma Indian Reservation.

I have testified before the U.S. District Court for the District of Arizona in connection with Globe Equity No. 59 (Gila Decree) on the groundwater/surface water relationship in the upper Gila River and on the impact of pumping on surface flows. I have also testified numerous times on the interrelationship of surface water and groundwater and the delineation of subflow of the San Pedro River, Arizona, in the general adjudication of the Gila River. I have provided professional witness testimony on behalf of the Bureau of Indian Affairs and the U.S. Department of Justice in connection with the adjudication of the Big Horn River System, Wyoming. My testimony was in connection with groundwater resources of the Wind River Indian Reservation.

On behalf of the Pyramid Lake Paiute Tribe, I have presented testimony on two occasions before a Nevada State Engineer's hearing in connection with: (1) the

impact on the groundwater resources in the San Emido Desert from groundwater pumpage for geothermal development; and (2) the impact on the groundwater resources in the Honey Lake basin resulting from the Honey Lake Water Importation Project. My qualifications are provided in more detail in the resume included in Appendix A.

- IV. To the best of my knowledge all referenced documents and all of the facts contained in this testimony are true and correct. To the extent this testimony contains opinions, such opinions are my own. I make these statements and provide these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.
- V. I have read the Soil and Water Resources Final Staff Assessment Technical Report (FSA) on the proposed BEP II project (proposed project) and have developed opinions on water quality and source of supply aspects of the project.

A. Water Quality

The general conclusions that I have reached from reading the FSA regarding water quality is that the Staff is opposed to the use of percolating groundwater pumped from beneath the Mesa because: (1) pumping groundwater will degrade the groundwater supply by inducing the upwelling of underlying brackish water; and (2) the proposed project will significantly use and deplete the best quality water supply available to other pumpers on the Mesa. These concerns are without merit and do not justify excluding the pumping of percolating groundwater at the proposed project site.

The Staff in the FSA concluded that "... pumping for the project is likely to cause upwelling of saline waters from the Bouse Formation and significant increases in groundwater salinity over the life of the project (p. 4.9-41)". Furthermore, the FSA indicates that because the potential degradation is irreversible and there is no other existing alternative water supply on the Mesa, "... the proposed project groundwater pumping is likely to produce direct significant adverse impacts to groundwater quality."

There are two points in the above FSA conclusions that are erroneous: (1) the irreversible nature and extent of any potential degradation; and (2) the viability of the groundwater beneath the Mesa as a water source.

1. **Irreversible Nature of Potential Degradation**

When a saline aquifer underlies a fresh water aquifer it is possible that pumping can result in the upwelling of the poorer quality water. This potential occurrence is schematically shown in Figure 1. The FSA (page 4.9-38) indicates that wells that are deep and pump at high rates would be most likely to increase the "draw-up" of brackish water from the Bouse Formation and cause degradation of the fresh water aquifer. That is a very broad conclusion by the Staff. Any intrusion of brackish water, if it occurs at all, would be confined to the immediate vicinity of

the deep, high production well because the well is the point of greatest head reduction (drawdown) within its pumping cone of depression. Head reduction is the driving force for the upwelling of poor quality water. The interference analysis conducted by the Staff to evaluate potential impacts on other wells in the area showed that water-level declines away from the project wells are insignificant. The interference effects are expected to be even less than those predicted in the FSA. Therefore, if degradation results from project pumping, it will be limited to the immediate project area and not "... anywhere within the cone of depression,..." as stated in the FSA.

During the operation of the project, any mixing that occurs in the upper zone of the aquifer in the immediate vicinity of the well will be recaptured and extracted by the proposed project well(s). Once the plant is closed and pumping stops, water levels will recover over time in response to aquifer transmissivity, minimizing or preventing any upward movement of saline water. Shallower wells in the general vicinity of the project wells should not be subject to degradation from Bouse Formation water.

The FSA (page 4.9-38) cites four examples of wells that exhibited, in the 1960's, increases in total dissolved solids concentration in the well water. Although it is noted in the FSA that other processes contribute to increasing salinity, it is concluded without evidence, that brackish water from the Bouse Formation was the "most likely" source. The data presented in the FSA is limited and inadequate to confirm that conclusion.

2. Loss of a Viable Water Supply

The FSA implies that because there are no other available water supplies on the Mesa and that the proposed project will adversely impact water quality, the only viable water supply on the Mesa will be lost to other pumps.

The quality of the groundwater at the project site is already marginal to inadequate for potable purposes and likely unsuitable for irrigation of certain crops. Reproduced below is Table 4 from the FSA that shows the groundwater quality at the project site and compares that quality with potable water standards. The concentrations of the various constituents that exceed one or more of the standard levels are highlighted.

Constituent (units)	CDHS ² Maximum Contaminant Level Primary (P) Secondary (S)	BEP I Production Well 2 8/22/2002	BEP I Production Well 1 12/16/2003	BEP I Production Well 2 12/16/2003	BEP I Monitoring Well 1 12/6/2004	BEP I Monitoring Well 2 12/6/2004	BEP I Monitoring Well 3 12/6/2004
Total Dissolved Solids (mg/L)	500,1000,and 1500 (S) ³	990 ⁴	920 ⁴	980 ⁴	1100 ⁵	1000 ⁵	1100 ⁵
Specific Conductance (micromhos/cm)	900, 1600, and 2200 (S)	1700 ⁵	1600 ⁴	1700 ⁵	1900 ⁵	1700 ⁵	1600 ⁴
Fluoride (mg/L)	2 (P)	29 ⁴	27 ⁴	27 ⁴			
Iron (mg/L)	0.30 (S)	0.17	0.52 ⁴	0.50 ⁴			
Chloride (mg/L)	250, 500, and 600 (S)	250	270 ⁴	270 ⁴	210	180	130
Sulfate (mg/L)	250, 500, and 600 (S)	280 ⁴	230	260 ⁴	380 ⁴	370 ⁴	340 ⁴
Turbidity (NTU)	5 (S)	0.48	4	16 ⁴			

¹ Groundwater Quality Sampling Results for BEP I Wells (BEP I, 2004 and 2005)

² CDHS = California Department of Health Services

³ Multiple MCL Listings – Multiple listing indicate the following regulatory levels: the first is the recommended limit, the second is the upper limit, and the third is the short-term limit.

⁴ Shaded numbers represent a value above the primary or secondary MCL.

⁵ Bold numbers represent a value above the upper limit of the secondary MCL.

Limited water quality data for other wells in the vicinity of the proposed project site also indicates the presence of poor quality water in the aquifer. The proposed project will utilize marginal quality groundwater not suitable for potable use.

Regarding the depletion of the groundwater supply beneath the Mesa, the FSA (page 4.9-12) discussed in general terms, that ground water levels are "... sensitive to pumping and have responded to changes in groundwater use in the Mesa over the last 40 years." Citing various USGS sources the staff indicated that the use of groundwater development for irrigation on the Mesa increased significantly during the 1970's and 1980's causing a regional groundwater level decline beneath the mesa and particularly a decline of "...more than 10 feet in the mid-1980's in the vicinity of the BEP II." However, in apparently conflicting statements the staff indicates that groundwater levels beneath the mesa have "largely" recovered to 1964 levels except near areas of significant ongoing groundwater use." That quote is followed by "although most farming on the Mesa was discontinued by the early 1990's, groundwater levels have not fully recovered." These quotes appear contradictory.

The two production wells (PW-1 and PW-2) at the BEP facility are perforated to a depth of 580 and 600 feet, respectively, with static water levels of 86 and 90 feet, respectively (Greystone Environmental Consultants, May 21, 2003, Table 1).

The staff projected the well interference (decline in static water level) after 40 years from the combined well interference pumping for both BEP II and BEP I to be 9.2 feet at a distance of 1,000 feet from the project site (FSR, Table 15, p. 4.9-55). The Staff utilized the simple Theis equation method which assumes all pumped water is removed from storage without any recharge. This assumption should substantially over estimate the water level decline after 40 years because recharge does occur in the area.

Regardless of the magnitude of the projected water level decline or the reported historical decline, the declines represent a temporary water level decline in the immediate area of the project of only 2 percent (10 foot decline, 500 feet of saturated aquifer at the project site). At the end of the 40 year project life (end of pumping) water levels will recover over time as they have historically from the reduction irrigation pumping. The groundwater supply source will not be lost or impaired by the proposed project.

B. Source of Project Water

The proposed project will pump percolating groundwater. The FSA equates the pumping of percolating groundwater to pumping Colorado River water. This is false. In California percolating groundwater is not surface water from both a legal and physical standpoint. The Staff is confusing water sources with the source of recharge to percolating groundwater.

The proposed project wells will pump percolating groundwater in storage that is intercepted by the well(s) cone of depression, which extend in all directions (360 degrees) from the pumping well. The percolating groundwater pumped by the wells is recharged from numerous sources including percolation from the Colorado River and its tributaries, return flow from applied irrigation water, percolation from canals and drainage ditches, and percolation from storm water detention ponds. The proposed project will not divert Colorado River water. A cone of depression expands until it intercepts sufficient recharge to sustain the well(s) pumping rate. It is expected that a major portion of the recharge to the proposed project well will occur from the Valley east of the proposed project site. This recharge will originate from return flows of irrigation water applied to the valley lands and drainage ditches. The FSA indicates that water in Rannells Drain will be the primary source of water intercepted by the well(s) cone of depression, but this is a simple assumption made by staff, and was not proven in the FSA. Groundwater storage beneath the Mesa to the north, west and south of the proposed site will also provide a significant source of water to the well(s). It does not appear that the Staff made any attempt to conduct any analytical studies to quantify the contributions of water provided by the various sources.

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

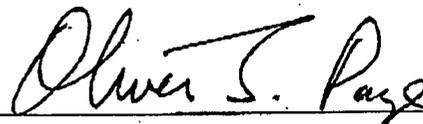
Application for Certification for the
Blythe Energy Project, Phase II

DECLARATION OF OLIVER S. PAGE

I, Oliver S. Page, declare as follows:

1. I am presently employed by Stetson Engineers Inc., as the Principal Hydrologist .
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to water resources for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at San Rafael, CA on July 14, 2005.



Oliver S. Page

WATER QUALITY AND SOILS

WATER QUALITY AND SOILS
Testimony of Thomas Cameron

I. Name: Thomas Cameron

II. Purpose:

My testimony addresses the effects of construction and operation of the Blythe Energy Project (BEP II) on surface water quality and soils resources.

III. Qualifications:

Thomas Cameron: I am a Project Manager retained by Caithness Blythe II. I hold a B.S. degree in engineering. I have 25 years experience in the energy field. I am responsible for managing the permitting activities for development of the BEP II. I am a principal and Vice President of Mountain View Power, Inc., LLC, Project Manager of Summit Power NW LLC, and President/Managing Director of Cameron & Associates, a power industry consulting firm. I was Project Director for the Blythe Energy Project and am also currently Project Director for the Summit Westward Project, a 520 MW Combined Cycle facility using the Siemens V84.3a technology; Vice President and Project Manager for the Bennett Mountain Power Plant, a 160 MW Simple Cycle facility using Siemens 501F technology; Vice President and Project Manager for the Lake Side Power Plant, a 535 MW Combined Cycle facility using Siemens 501 F technology. I have held assignments as Project Manager for Siemens Power Corporation in charge of design, procurement, equipment manufacturing, construction, and commissioning of several large gas turbine power projects, including the 520 MW Bridgeport Energy Project, using the Siemens V84.3a technology. This was the first project of its type using the new Siemens technology in the world. During execution of these projects, my responsibilities included project management, cost and schedule control, technical and commercial contract negotiations, selection and coordination of vendors, engineering firms, and erection contractors, supervision of engineering and site staff, preparation of bid specifications, coordination of construction management, startup coordination and customer interfaces

IV. To the best of my knowledge all referenced documents and all of the facts contained in this testimony are true and correct. To the extent this testimony contains opinions, such opinions are my own. I make these statements and provide these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

V. Summary:

I have reviewed the Soil and Water Resources section of the Final Staff Assessment (FSA). This testimony relates only to the effects of the BEP II on surface water quality and soil resources only. Testimony relating to water

resources and groundwater quality is included in the Water Resources Testimony of Jeff Harvey and Ed Smith and the Water Resources Testimony of Oliver Page,.

I have reviewed the Proposed Conditions of Certification contained in the Soil and Water Resources section of the FSA and agree with Conditions of Certification **SOIL & WATER – 3, 4, 5, 6 and 10.**

Condition of Certification **SOIL & WATER-1** should be deleted because the project is not required to obtain a General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges of Storm Water Associated with Construction Activity because all stormwater runoff during construction will be retained on-site. Since no stormwater leaves the site, there is no discharge and therefore a permit is not required and a Stormwater Pollution Prevention Plan is not required.

Condition of Certification **SOIL & WATER-2** should be deleted. It is not required because the entire BEP II site will be graded to direct all stormwater runoff to the BEP retention basin. That basin's design was approved by the Commission during the compliance phase for BEP, is currently in operation, is capable of handling the 100-year storm event and flow for the project site and watershed area of approximately 700 acres. It is the mechanism by which the Committee can be assured stormwater and sediments will not leave the site. If stormwater and sediments cannot leave the site, then there cannot be impacts to local surface waters from uncontrolled stormwater runoff during construction. While CB II recognizes that this condition has become standard for Commission licenses, in the case of BEP II, the exercise to develop a plan that will confirm what the BEP retention was designed and built (and approved by the Commission Compliance Staff) to accomplish, is futile with no environmental benefit.

CBII objections to other Staff Proposed Conditions of Certification in the Soil & Water Resources Section of the FSA and Supplement are contained in CBII's Water Resources Testimony.

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

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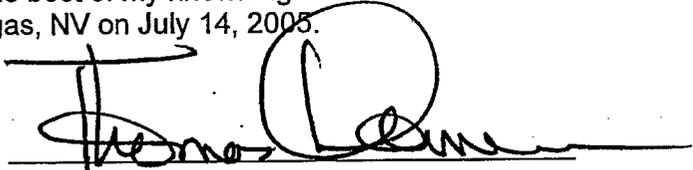
Application for Certification for the
Blythe Energy Project, Phase II

DECLARATION OF THOMAS
CAMERON

I, Thomas Cameron, declare as follows:

1. I am presently retained by Caithness Blythe II as the Project Manager for the Blythe Energy Project, Phase II.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to **Cultural Resources** for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at Las Vegas, NV on July 14, 2005.

A handwritten signature in black ink, appearing to read "Thomas Cameron", is written over a horizontal line. The signature is stylized with a large, circular flourish at the end.

STATE OF CALIFORNIA
Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

Application for Certification for the
Blythe Energy Project, Phase II

**DECLARATION OF THOMAS
CAMERON**

I, Thomas Cameron, declare as follows:

1. I am presently retained by Caithness Blythe II as the Project Manager for the Blythe Energy Project, Phase II.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to **Water Quality and Soils** for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at Las Vegas, NV on July 14, 2005.



Thomas Cameron

ALTERNATIVES

ALTERNATIVES
Testimony of Jeffrey G. Harvey

- I. Name: Jeffrey G. Harvey, Ph.D.
- II. Purpose: My testimony addresses issues pertaining to the Alternatives section of the FSA for the Blythe Energy Project II.
- III. Qualifications:

I am self-employed as the Principal and Senior Scientist for the Harvey Consulting Group, LLC, (HCG, LLC), and was previously the California General Manager for Greystone Environmental Consultants, Inc., in Sacramento, California. I have 24 years of professional experience as a consultant in project planning and environmental reporting for local, state, and federal government agencies, nonprofit environmental groups, and private resource developers. In that time I have organized and managed more than 250 projects, leading multi-disciplinary teams of scientists, engineers, lawyers, economists, and planners. Projects have included environmental reports and assessments, and special resource analyses for a variety of proposals including water transfers, water conservation, energy development, mining, policy analysis of state-wide water resources and energy systems management problems, large mixed land use developments, public infrastructure projects, aggregate mining, and recreation resorts.

I hold degrees in Geography, including a B.A. (emphasis in physical geography), and M.A. (emphases in environmental planning, water resources development, and impact analysis) from CSU Chico, and a Ph.D. from UCLA, (emphases in environmental and policy, natural resources management, western water resources, and impact analysis).

I have worked on western water, energy and related natural resources policy issues since 1983, including power plant and hydroelectric power development, water development, management, and planning, and analyses of land and agricultural water use practices and conservation. For the past 6 years I have been the Transfer Program Consultant to the San Diego County Water Authority (SDCWA) for the agricultural water transfer of up to 200,000 acre-feet of Colorado River water between SDCWA and the Imperial Irrigation District.

I was the Project Manager for environmental planning for the Blythe Energy Project beginning in 1998. I have been responsible for preparation of environmental documentation including the AFC, permitting documents, and related submittals to the CEC. I prepared the water resources analyses for the AFC, and the subsequent response to Data Requests. My

testimony is also based upon review of the Final Staff Assessment (FSA) / staff testimony regarding Alternatives.

- IV. To the best of my knowledge all referenced documents and all of the facts contained in this testimony are true and correct. To the extent this testimony contains opinions, such opinions are my own. I make these statements and provide these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.
- V. The FSA Alternatives assessment, including selection of alternative sites, is entirely predicated on conclusions that the proposed project has significant impacts on water, and airport safety. As demonstrated in testimony presented for Water Resources and for Traffic and Transportation Safety, potential impacts in these issue areas are less than significant, and to the extent that there are potential impacts, they can be readily mitigated.

Staff concludes that the Interstate 10 Site is the preferred alternative since it: *"...has the best potential for reducing or eliminating the significant impacts of the proposed project, and no significant impacts have been identified."* (FSA, p. 6-1). This conclusion is reached, as for all the alternative sites considered, based upon an assumption that other mitigation measures are implemented to reduce or eliminate significant impacts (i.e., the plant will be dry-cooled and equipped with a zero-liquid discharge system). The Interstate 10 Site is located on prime farmland in active development for crop production, and staff does note later in the assessment that *"The I-10 site is on prime farmland, so mitigation would also be required to compensate for the loss of farmland."* (FSA, p.6-27).

Staff's site selection was based upon fundamentally flawed impact findings for water resources, and misunderstood issues pertaining to transmission, and readily mitigable impacts pertaining to airport safety. As demonstrated in testimony for the issues assumed to be significant impacts, the proposed project site has fewer impacts than the alternative sites selected in staff's analysis, and has no unavoidable significant impacts. Therefore, we submit that the proposed site should be determined to be the environmentally preferred site.

Finally we note that selection of alternative properties for the proposed project at this late date would significantly thwart attainment of basic project goals and objectives – one of the criteria for selection of alternatives in CEQA – to participate in and fulfill the terms of Southern California Edison's Requests for Offers. Selection of an alternative site would require initiation of a whole new filing process, site specific

investigations, consultations and permitting processes for all elements of the plant (CEC, Western, MDAQMD, RWQCB, USFWS, CDFG, etc), imposing significant delay, and extending the uncertainty of a successful project.

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

Application for Certification for the
Blythe Energy Project, Phase II

DOCKET NO. 02-AFC-1

DECLARATION OF

Jeffrey G. Harvey, Ph.D.

I, Jeffrey G. Harvey, Ph.D., declare as follows:

1. I am presently self-employed as the Principal and Senior Scientist.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Alternatives for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at Sacramento, CA on July 12, 2005.


Jeffrey G. Harvey, Ph.D.

COMPLIANCE

COMPLIANCE

Testimony of Thomas Cameron and Robert E. Gavahan

I. Name: Thomas Cameron
Robert E. Gavahan

II. Purpose:

Our testimony addresses the Compliance issues related to the construction and operation of the Blythe Energy Project, Phase II (BEP II).

III. Qualifications:

Tom Cameron: I am a Project Manager retained by Caithness Blythe II. I hold a B.S. degree in engineering. I have 25 years experience in the energy field. I am responsible for managing the permitting activities for development of the BEP II. I am a principal and Vice President of Mountain View Power, Inc., LLC, Project Manager of Summit Power NW LLC, and President/Managing Director of Cameron & Associates, a power industry consulting firm. I was Project Director for the Blythe Energy Project and am also currently Project Director for the Summit Westward Project, a 520 MW Combined Cycle facility using the Siemens V84.3a technology; Vice President and Project Manager for the Bennett Mountain Power Plant, a 160 MW Simple Cycle facility using Siemens 501F technology; Vice President and Project Manager for the Lake Side Power Plant, a 535 MW Combined Cycle facility using Siemens 501 F technology. I have held assignments as Project Manager for Siemens Power Corporation in charge of design, procurement, equipment manufacturing, construction, and commissioning of several large gas turbine power projects, including the 520 MW Bridgeport Energy Project, using the Siemens V84.3a technology. This was the first project of its type using the new Siemens technology in the world. During execution of these projects, my responsibilities included project management, cost and schedule control, technical and commercial contract negotiations, selection and coordination of vendors, engineering firms, and erection contractors, supervision of engineering and site staff, preparation of bid specifications, coordination of construction management, startup coordination and customer interfaces. A detailed resume is included in Appendix A.

Robert E. Gavahan: I am a Project Engineer employed by Power Engineers Collaborative, LLC. I hold a B.S. degree in mechanical engineering from the University of Minnesota. I have 15 years experience in the energy field. I am responsible for the plant engineering related to the development of the BEP II. My qualifications are more completely detailed in the resume attached in Appendix A.

IV. To the best of our knowledge all referenced documents and all of the facts contained in this testimony are true and correct. To the extent this testimony contains opinions, such opinions are our own. We make these statements and provide these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

V. Summary:

We have reviewed the Compliance section of the Final Staff Assessment and agree with its conclusions and Proposed Conditions of Certification.

STATE OF CALIFORNIA
Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

Application for Certification for the
Blythe Energy Project, Phase II

DECLARATION OF THOMAS
CAMERON

I, Thomas Cameron, declare as follows:

1. I am presently retained by Caithness Blythe II as the Project Manager for the Blythe Energy Project, Phase II.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to **Compliance** for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at Las Vegas, NV on July 14, 2005.



Thomas Cameron

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

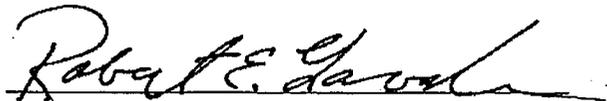
Application for Certification for the
Blythe Energy Project, Phase II

DECLARATION OF
ROBERT E. GAVAHAN

I, Robert Gavahan, declare as follows:

1. I am presently employed by Power Engineers Collaborative, a provider of engineering services to Caithness Blythe II as the project engineer for the provision of owners engineer services.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Compliance for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at West Alflis, WI on June 14, 2005.



EFFICIENCY

EFFICIENCY

Testimony of Thomas Cameron and Robert E. Gavahan

I. Name: Thomas Cameron
Robert E. Gavahan

II. Purpose:

Our testimony addresses the Efficiency of the Blythe Energy Project, Phase II (BEP II).

III. Qualifications:

Tom Cameron: I am a Project Manager retained by Caithness Blythe II. I hold a B.S. degree in engineering. I have 25 years experience in the energy field. I am responsible for managing the permitting activities for development of the BEP II. I am a principal and Vice President of Mountain View Power, Inc., LLC, Project Manager of Summit Power NW LLC, and President/Managing Director of Cameron & Associates, a power industry consulting firm. I was Project Director for the Blythe Energy Project and am also currently Project Director for the Summit Westward Project, a 520 MW Combined Cycle facility using the Siemens V84.3a technology; Vice President and Project Manager for the Bennett Mountain Power Plant, a 160 MW Simple Cycle facility using Siemens 501F technology; Vice President and Project Manager for the Lake Side Power Plant, a 535 MW Combined Cycle facility using Siemens 501 F technology. I have held assignments as Project Manager for Siemens Power Corporation in charge of design, procurement, equipment manufacturing, construction, and commissioning of several large gas turbine power projects, including the 520 MW Bridgeport Energy Project, using the Siemens V84.3a technology. This was the first project of its type using the new Siemens technology in the world. During execution of these projects, my responsibilities included project management, cost and schedule control, technical and commercial contract negotiations, selection and coordination of vendors, engineering firms, and erection contractors, supervision of engineering and site staff, preparation of bid specifications, coordination of construction management, startup coordination and customer interfaces. A detailed resume is included in Appendix A.

Robert E. Gavahan: I am a Project Engineer employed by Power Engineers Collaborative, LLC. I hold a B.S. degree in mechanical engineering from the University of Minnesota. I have 15 years experience in the energy field. I am responsible for the plant engineering related to the development of the BEP II. My qualifications are more completely detailed in the resume attached in Appendix A.

IV. To the best of our knowledge all referenced documents and all of the facts contained in this testimony are true and correct. To the extent this testimony contains opinions, such opinions are our own. We make these statements and provide these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

V. Summary:

We have reviewed the Efficiency section of the Final Staff Assessment and agree with its conclusions that the BEP II will not create significant adverse effects on energy supplies or resources and will not consume energy in a wasteful or inefficient manner.

STATE OF CALIFORNIA
Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

Application for Certification for the
Blythe Energy Project, Phase II

DECLARATION OF THOMAS
CAMERON

I, Thomas Cameron, declare as follows:

1. I am presently retained by Caithness Blythe II as the Project Manager for the Blythe Energy Project, Phase II.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to **Efficiency** for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at Las Vegas, NV on July 14, 2005.



A handwritten signature in black ink, appearing to read 'Thomas Cameron', is written over a horizontal line. The signature is stylized and cursive.

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

Application for Certification for the
Blythe Energy Project, Phase II

DECLARATION OF
ROBERT E. GAVAHAN

I, Robert Gavahan, declare as follows:

1. I am presently employed by Power Engineers Collaborative, a provider of engineering services to Caithness Blythe II as the project engineer for the provision of owners engineer services.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Power Plant Efficiency for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at West Allis, WI on June 14, 2005.



FACILITY DESIGN

FACILITY DESIGN
Testimony of Thomas Cameron and Robert E. Gavahan

I. Name: Thomas Cameron
Robert E. Gavahan

II. Purpose:

Our testimony addresses the Design of the Blythe Energy Project, Phase II (BEP II).

III. Qualifications:

Tom Cameron: I am a Project Manager retained by Caithness Blythe II. I hold a B.S. degree in engineering. I have 25 years experience in the energy field. I am responsible for managing the permitting activities for development of the BEP II. I am a principal and Vice President of Mountain View Power, Inc., LLC, Project Manager of Summit Power NW LLC, and President/Managing Director of Cameron & Associates, a power industry consulting firm. I was Project Director for the Blythe Energy Project and am also currently Project Director for the Summit Westward Project, a 520 MW Combined Cycle facility using the Siemens V84.3a technology; Vice President and Project Manager for the Bennett Mountain Power Plant, a 160 MW Simple Cycle facility using Siemens 501F technology; Vice President and Project Manager for the Lake Side Power Plant, a 535 MW Combined Cycle facility using Siemens 501 F technology. I have held assignments as Project Manager for Siemens Power Corporation in charge of design, procurement, equipment manufacturing, construction, and commissioning of several large gas turbine power projects, including the 520 MW Bridgeport Energy Project, using the Siemens V84.3a technology. This was the first project of its type using the new Siemens technology in the world. During execution of these projects, my responsibilities included project management, cost and schedule control, technical and commercial contract negotiations, selection and coordination of vendors, engineering firms, and erection contractors, supervision of engineering and site staff, preparation of bid specifications, coordination of construction management, startup coordination and customer interfaces. A detailed resume is included in Appendix A.

Robert E. Gavahan: I am a Project Engineer employed by Power Engineers Collaborative, LLC. I hold a B.S. degree in mechanical engineering from the University of Minnesota. I have 15 years experience in the energy field. I am responsible for the plant engineering related to the development of the BEP II. My qualifications are more completely detailed in the resume attached in Appendix A.

IV. To the best of our knowledge all referenced documents and all of the facts contained in this testimony are true and correct. To the extent this testimony contains opinions, such opinions are our own. We make these statements and provide these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

V. Summary:

We have reviewed the Facility Design section of the Final Staff Assessment and agree with its conclusions that the BEP II will comply with all applicable facility design laws, ordinances, regulations and standards and we further agree with all Staff Proposed Conditions of Certification.

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

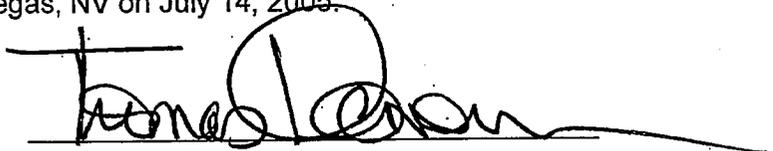
Application for Certification for the
Blythe Energy Project, Phase II

**DECLARATION OF THOMAS
CAMERON**

I, Thomas Cameron, declare as follows:

1. I am presently retained by Caithness Blythe II as the Project Manager for the Blythe Energy Project, Phase II.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to **Facility Design** for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at Las Vegas, NV on July 14, 2005.

A handwritten signature in black ink, appearing to read "Thomas Cameron", written over a horizontal line.

STATE OF CALIFORNIA
Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

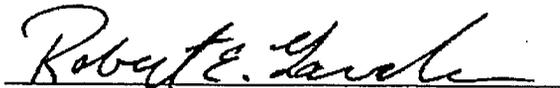
Application for Certification for the
Blythe Energy Project, Phase II

DECLARATION OF
ROBERT E. GAVAHAN

I, Robert Gavahan, declare as follows:

1. I am presently employed by Power Engineers Collaborative, a provider of engineering services to Caithness Blythe II as the project engineer for the provision of owners engineer services.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Facility Design for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at West Allis, WI on June 14, 2005.


Robert E. Gavahan

GEOLOGY AND PAELONTOLOGY

GEOLOGY AND PAELONTOLOGY
Testimony of Thomas Cameron

I. Name: Thomas Cameron

II. Purpose:

My testimony addresses the Geological and Paleontological Resources issues related to construction and operation of the Blythe Energy Project, Phase II (BEP II).

III. Qualifications:

Tom Cameron: I am a Project Manager retained by Caithness Blythe II. I hold a B.S. degree in engineering. I have 25 years experience in the energy field. I am responsible for managing the permitting activities for development of the BEP II. I am a principal and Vice President of Mountain View Power, Inc., LLC, Project Manager of Summit Power NW LLC, and President/Managing Director of Cameron & Associates, a power industry consulting firm. I was Project Director for the Blythe Energy Project and am also currently Project Director for the Summit Westward Project, a 520 MW Combined Cycle facility using the Siemens V84.3a technology; Vice President and Project Manager for the Bennett Mountain Power Plant, a 160 MW Simple Cycle facility using Siemens 501F technology; Vice President and Project Manager for the Lake Side Power Plant, a 535 MW Combined Cycle facility using Siemens 501 F technology. I have held assignments as Project Manager for Siemens Power Corporation in charge of design, procurement, equipment manufacturing, construction, and commissioning of several large gas turbine power projects, including the 520 MW Bridgeport Energy Project, using the Siemens V84.3a technology. This was the first project of its type using the new Siemens technology in the world. During execution of these projects, my responsibilities included project management, cost and schedule control, technical and commercial contract negotiations, selection and coordination of vendors, engineering firms, and erection contractors, supervision of engineering and site staff, preparation of bid specifications, coordination of construction management, startup coordination and customer interfaces. A more detailed resume is included in Appendix A.

IV. To the best of my knowledge all referenced documents and all of the facts contained in this testimony are true and correct. To the extent this testimony contains opinions, such opinions are my own. I make these statements and provide these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

V. Summary:

I have reviewed the Geology and Paleontology section of the Final Staff Assessment and agree with the Staff Proposed Conditions of Certification except **PAL-5**. CBII proposed modifications to **PAL-5** in its June 24, 2005 Prehearing Conference Statement. Staff presented additional modifications at the June 29, 2005 Prehearing Conference. I agree with Staff's proposed modifications to **PAL-5**, which is reproduced below for the Committee's use.

PAL-5 The project owner shall ensure that the PRS and PRM(s) monitor consistently with the PRMMP all construction-related grading, excavation, trenching, and augering in **previously undisturbed areas materials** where potentially fossil-bearing materials have been identified. In the event that the PRS determines full time monitoring is not necessary in locations that were identified as potentially fossil-bearing in the PRMMP, the project owner shall notify and seek the concurrence of the CPM.

The project owner shall ensure that the PRS and PRM(s) have the authority to halt or redirect construction if paleontological resources are encountered. The project owner shall ensure that there is no interference with monitoring activities unless directed by the PRS. Monitoring activities shall be conducted as follows:

1. Any change of monitoring different from the accepted program presented in the PRMMP shall be proposed in a letter or email from the PRS and the project owner to the CPM prior to the change in monitoring. The letter or email shall include the justification for the change in monitoring and be submitted to the CPM for review and approval.
2. The project owner shall ensure that the PRM(s) keeps a daily log of monitoring of paleontological resource activities. The PRS may informally discuss paleontological resource monitoring and mitigation activities with the CPM at any time.
3. The project owner shall ensure that the PRS immediately notifies the CPM of any incidents of non-compliance with any paleontological resources Conditions of Certification. The PRS shall recommend corrective action to resolve the issues or achieve compliance with the Conditions of Certification.
4. For any significant paleontological resources encountered, either the project owner or the PRS shall notify the CPM immediately (no later than the following morning after the find,

or Monday morning in the case of a weekend) of any halt of construction activities.

The project owner shall ensure that the PRS prepares a summary of the monitoring and other paleontological activities that will be placed in the Monthly Compliance Reports (MCR). The summary will include the name(s) of PRS or PRM(s) active during the month, general descriptions of training and monitored construction activities and general locations of excavations, grading, etc. A section of the report shall include the geologic units or subunits encountered; descriptions of sampling within each unit; and a list of identified fossils. A final section of the report shall address any issues or concerns about the project relating to paleontologic monitoring including any incidents of non-compliance and any changes to the monitoring plan that have been approved by the CPM. If no monitoring took place during the month, the report shall include an explanation in the summary as to why monitoring was not conducted.

Verification: The project owner shall ensure that the PRS submits the summary of monitoring and paleontological activities in the MCR. When feasible, the CPM shall be notified 10 days in advance of any proposed changes in monitoring different from the plan identified in the PRMMP. If there is any unforeseen change in monitoring, the notice shall be given as soon as possible prior to implementation of the change.

With the Conditions of Certification as modified above, the BEP II will comply with all applicable laws, ordinances, regulations and standards and will not result in significant geological or paleontological resources impacts.

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

Application for Certification for the
Blythe Energy Project, Phase II

DECLARATION OF THOMAS
CAMERON

I, Thomas Cameron, declare as follows:

1. I am presently retained by Caithness Blythe II as the Project Manager for the Blythe Energy Project, Phase II.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to **Geology and Paleontology** for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at Las Vegas, NV on July 14, 2005.



A handwritten signature in black ink, appearing to read 'Thomas Cameron', is written over a horizontal line.

LAND USE

LAND USE
Testimony of Jeffrey G. Harvey

I. Name: Jeffrey G. Harvey

II. Purpose:

My testimony addresses the Land Use issues related to the construction and operation of the Blythe Energy Project (BEP II).

III. Qualifications:

Jeffrey G. Harvey: I am self-employed as the Principal and Senior Scientist for the Harvey Consulting Group, LLC, (HCG, LLC), and was previously the California General Manager for Greystone Environmental Consultants, Inc., in Sacramento, California. I have 24 years of professional experience as a consultant in project planning and environmental reporting for local, state, and federal government agencies, nonprofit environmental groups, and private resource developers. In that time I have organized and managed more than 250 projects, leading multi-disciplinary teams of scientists, engineers, lawyers, economists, and planners. Projects have included environmental reports and assessments, and special resource analyses for a variety of proposals including water transfers, water conservation, energy development, mining, policy analysis of state-wide water resources and energy systems management problems, large mixed land use developments, public infrastructure projects, aggregate mining, and recreation resorts. I was the Project Manager for environmental planning for the Blythe Energy Project beginning in 1998 and BEP II since 2001. I have been responsible for preparation of environmental documentation including the AFC, permitting documents, and related submittals to the CEC.

IV. To the best of my knowledge all referenced documents and all of the facts contained in this testimony are true and correct. To the extent this testimony contains opinions, such opinions are my own. I make these statements and provide these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

V. Summary:

I have reviewed the Land Use section of the Final Staff Assessment (FSA). I disagree with the analysis contained in the FSA except for all of Staff's analysis related to aircraft safety, and consistency with the Riverside County Airport Land Use Commission's advisory opinion and the Comprehensive Land Use Plan (CLUP) for the Blythe Airport. These issues are addressed in the Traffic and Transportation Testimony of Robert Looper, Steven Morris and Kennard F. Kosky.

I also disagree with Staff's characterization of the Voluntary Water Conservation Offset Plan (WCOP) for the reasons discussed in my Water Resources Testimony.

However, notwithstanding the disagreements identified above, I do agree with Staff that the BEP II is consistent with the City's General Plan and zoning and with the height variance it is my professional opinion that the BEP II will comply with all applicable land use laws, ordinance, regulations and standards and will not result in significant land use impacts.

I have reviewed the Staff Proposed Conditions of Certification and agree with all of them except **LAND-3**. CBII proposed modifications to **LAND-3** in its Prehearing Conference Statement, dated June 24, 2005. Staff agreed to CBII's proposed modifications and they are reproduced below for the Committee's use.

LAND-3 If the WCOP involves permanent transfer of irrigation water previously used for *land designated as either Prime Farmland or Farmland of Statewide Importance as defined by the Department of Conservation (Designated Farmland)* ~~productive irrigated farmland~~, the project owner shall mitigate at a one-to-one acre ratio for the conversion of ~~productive farmland~~ in the fulfillment of the WCOP through permanent retirement (time of the expected life of the project or greater) by implementing one or more of the following strategies:

- 1) a mitigation fee payment to the Riverside County agricultural land trust or the American Farmland Trust consistent with a prepared Farmlands Mitigation Agreement. The payment amount shall be determined by contacting the local assessor's office to determine the assessed value for the acreage of productive agricultural land retired by the WCOP, or by a real estate appraiser selected by the project owner and approved by the CPM.
- 2) securing the acquisition of an agricultural easement for other farmland (retired or fallow land that has been actively irrigated within the past five years within the Palo Verde Irrigation District Service area). ~~Farmlands shall include areas of row crops and non-citrus producing orchards that depend upon Colorado River groundwater.~~ Easements for irrigated farmland would be acquired based on the California Department of Conservation's Important Farmland Classification Map, but in no case shall be less than a 1:1 ratio. The program will involve approximately 726 acres assuming an accounting basis of consumptive water use of 4.2 acre-feet per acre.

Verification: Thirty (30) days prior to start of construction, the project owner shall provide in its monthly compliance reports a discussion of any land and/or easements purchased in the preceding month by the trust with the mitigation fee money provided, and the provisions to guarantee that the land managed by the trust will be farmed in perpetuity. This discussion must include the schedule for purchasing the same acreage of productive **Designated Farmland** as retired by the WCOP and/or easements within one year of start of construction as compensation for the acreage of productive **Designated Farmland** to be converted by the WCOP.

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

Application for Certification for the
Blythe Energy Project, Phase II

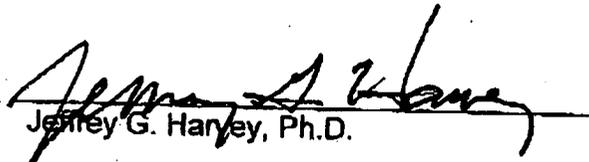
DOCKET NO. 02-AFC-1

DECLARATION OF
Jeffrey G. Harvey, Ph.D.

I, Jeffrey G. Harvey, Ph.D., declare as follows:

1. I am presently self-employed as the Principal and Senior Scientist.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Land Use for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at Sacramento, CA on July 12, 2005.



Jeffrey G. Harvey, Ph.D.

NOISE AND VIBRATION

NOISE AND VIBRATION
Testimony of Thomas Cameron and Robert E. Gavahan

I. Name: Thomas Cameron
Robert E. Gavahan

II. Purpose:

Our testimony addresses Noise and Vibration issues related to the construction and operation of the Blythe Energy Project, Phase II (BEP II).

III. Qualifications:

Tom Cameron: I am a Project Manager retained by Caithness Blythe II. I hold a B.S. degree in engineering. I have 25 years experience in the energy field. I am responsible for managing the permitting activities for development of the BEP II. I am a principal and Vice President of Mountain View Power, Inc., LLC, Project Manager of Summit Power NW LLC, and President/Managing Director of Cameron & Associates, a power industry consulting firm. I was Project Director for the Blythe Energy Project and am also currently Project Director for the Summit Westward Project, a 520 MW Combined Cycle facility using the Siemens V84.3a technology; Vice President and Project Manager for the Bennett Mountain Power Plant, a 160 MW Simple Cycle facility using Siemens 501F technology; Vice President and Project Manager for the Lake Side Power Plant, a 535 MW Combined Cycle facility using Siemens 501 F technology. I have held assignments as Project Manager for Siemens Power Corporation in charge of design, procurement, equipment manufacturing, construction, and commissioning of several large gas turbine power projects, including the 520 MW Bridgeport Energy Project, using the Siemens V84.3a technology. This was the first project of its type using the new Siemens technology in the world. During execution of these projects, my responsibilities included project management, cost and schedule control, technical and commercial contract negotiations, selection and coordination of vendors, engineering firms, and erection contractors, supervision of engineering and site staff, preparation of bid specifications, coordination of construction management, startup coordination and customer interfaces. A detailed resume is included in Appendix A.

Robert E. Gavahan: I am a Project Engineer employed by Power Engineers Collaborative, LLC. I hold a B.S. degree in mechanical engineering from the University of Minnesota. I have 15 years experience in the energy field. I am responsible for the plant engineering related to the development of the BEP II. My qualifications are more completely detailed in the resume attached in Appendix A.

IV. To the best of our knowledge all referenced documents and all of the facts contained in this testimony are true and correct. To the extent this testimony contains opinions, such opinions are our own. We make these statements and provide these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

V. Summary:

We have reviewed the Noise and Vibration section of the Final Staff Assessment and agree with its conclusions that the BEP II will not create significant noise impacts and will comply with all applicable noise –related laws, ordinances, regulations and standards. We further agree with the Proposed Conditions of Certification contained in the Noise and Vibration section of the Final Staff Assessment.

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

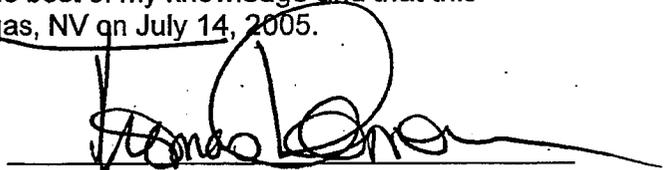
Application for Certification for the
Blythe Energy Project, Phase II

**DECLARATION OF THOMAS
CAMERON**

I, Thomas Cameron, declare as follows:

1. I am presently retained by Caithness Blythe II as the Project Manager for the Blythe Energy Project, Phase II.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to **Noise and Vibration** for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at Las Vegas, NV on July 14, 2005.



A handwritten signature in black ink, appearing to read 'Thomas Cameron', is written over a horizontal line. The signature is stylized and cursive.

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

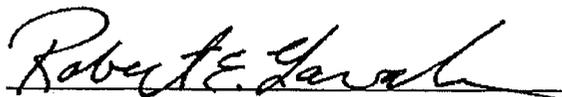
Application for Certification for the
Blythe Energy Project, Phase II

DECLARATION OF
ROBERT E. GAVAHAN

I, Robert Gavahan, declare as follows:

1. I am presently employed by Power Engineers Collaborative, a provider of engineering services to Caithness Blythe II as the project engineer for the provision of owners engineer services.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Noise and Vibration for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at West Allis, WI on June 14, 2005.



PUBLIC HEALTH

PUBLIC HEALTH
Testimony of Thomas Cameron

I. Name: Thomas Cameron

II. Purpose:

My testimony addresses the Public Health issues related to construction and operation of the Blythe Energy Project, Phase II (BEP II).

III. Qualifications:

Tom Cameron: I am a Project Manager retained by Caithness Blythe II. I hold a B.S. degree in engineering. I have 25 years experience in the energy field. I am responsible for managing the permitting activities for development of the BEP II. I am a principal and Vice President of Mountain View Power, Inc., LLC, Project Manager of Summit Power NW LLC, and President/Managing Director of Cameron & Associates, a power industry consulting firm. I was Project Director for the Blythe Energy Project and am also currently Project Director for the Summit Westward Project, a 520 MW Combined Cycle facility using the Siemens V84.3a technology; Vice President and Project Manager for the Bennett Mountain Power Plant, a 160 MW Simple Cycle facility using Siemens 501F technology; Vice President and Project Manager for the Lake Side Power Plant, a 535 MW Combined Cycle facility using Siemens 501 F technology. I have held assignments as Project Manager for Siemens Power Corporation in charge of design, procurement, equipment manufacturing, construction, and commissioning of several large gas turbine power projects, including the 520 MW Bridgeport Energy Project, using the Siemens V84.3a technology. This was the first project of its type using the new Siemens technology in the world. During execution of these projects, my responsibilities included project management, cost and schedule control, technical and commercial contract negotiations, selection and coordination of vendors, engineering firms, and erection contractors, supervision of engineering and site staff, preparation of bid specifications, coordination of construction management, startup coordination and customer interfaces. A more detailed resume is included in Appendix A.

IV. To the best of my knowledge all referenced documents and all of the facts contained in this testimony are true and correct. To the extent this testimony contains opinions, such opinions are my own. I make these statements and provide these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

V. Summary:

I have reviewed the Public Health section of the Final Staff Assessment and agree with the conclusions, recommendations and Staff Proposed Conditions of Certification. I agree with Staff's conclusion that the BEP II will not result in significant impacts to public health and will comply with all applicable public health-related laws, ordinances, regulations and standards.

STATE OF CALIFORNIA
Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

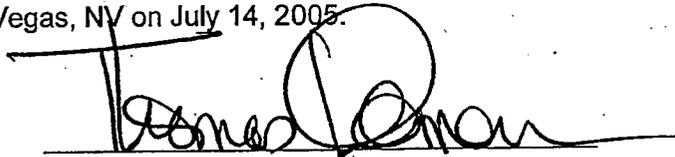
Application for Certification for the
Blythe Energy Project, Phase II

DECLARATION OF THOMAS
CAMERON

I, Thomas Cameron, declare as follows:

1. I am presently retained by Caithness Blythe II as the Project Manager for the Blythe Energy Project, Phase II.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to **Public Health** for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at Las Vegas, NV on July 14, 2005.



Thomas Cameron

RELIABILITY

RELIABILITY

Testimony of Thomas Cameron and Robert E. Gavahan

I. Name: Thomas Cameron
Robert E. Gavahan

II. Purpose:

Our testimony addresses the Reliability of the Blythe Energy Project, Phase II (BEP II).

III. Qualifications:

Tom Cameron: I am a Project Manager retained by Caithness Blythe II. I hold a B.S. degree in engineering. I have 25 years experience in the energy field. I am responsible for managing the permitting activities for development of the BEP II. I am a principal and Vice President of Mountain View Power, Inc., LLC, Project Manager of Summit Power NW LLC, and President/Managing Director of Cameron & Associates, a power industry consulting firm. I was Project Director for the Blythe Energy Project and am also currently Project Director for the Summit Westward Project, a 520 MW Combined Cycle facility using the Siemens V84.3a technology; Vice President and Project Manager for the Bennett Mountain Power Plant, a 160 MW Simple Cycle facility using Siemens 501F technology; Vice President and Project Manager for the Lake Side Power Plant, a 535 MW Combined Cycle facility using Siemens 501 F technology. I have held assignments as Project Manager for Siemens Power Corporation in charge of design, procurement, equipment manufacturing, construction, and commissioning of several large gas turbine power projects, including the 520 MW Bridgeport Energy Project, using the Siemens V84.3a technology. This was the first project of its type using the new Siemens technology in the world. During execution of these projects, my responsibilities included project management, cost and schedule control, technical and commercial contract negotiations, selection and coordination of vendors, engineering firms, and erection contractors, supervision of engineering and site staff, preparation of bid specifications, coordination of construction management, startup coordination and customer interfaces. A detailed resume is included in Appendix A.

Robert E. Gavahan: I am a Project Engineer employed by Power Engineers Collaborative, LLC. I hold a B.S. degree in mechanical engineering from the University of Minnesota. I have 15 years experience in the energy field. I am responsible for the plant engineering related to the development of the BEP II. My qualifications are more completely detailed in the resume attached in Appendix A.

IV. To the best of our knowledge all referenced documents and all of the facts contained in this testimony are true and correct. To the extent this testimony contains opinions, such opinions are our own. We make these statements and provide these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

V. Summary:

We have reviewed the Reliability section of the Final Staff Assessment and agree with its conclusions that the BEP II will be built and operated in a manner consistent with industry norms for reliable operation. Additional testimony relating to Reliability as it affects alternative technologies is presented in the CBI's Water Resources Testimony.

STATE OF CALIFORNIA
Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

Application for Certification for the
Blythe Energy Project, Phase II

DECLARATION OF THOMAS
CAMERON

I, Thomas Cameron, declare as follows:

1. I am presently retained by Caithness Blythe II as the Project Manager for the Blythe Energy Project, Phase II.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to **Reliability** for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at Las Vegas, NV on July 14, 2005.

A handwritten signature in black ink, appearing to read "Thomas Cameron", is written over a horizontal line. The signature is stylized and includes a large circular flourish.

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

Application for Certification for the
Blythe Energy Project, Phase II

DECLARATION OF
ROBERT E. GAVAHAN

I, Robert Gavahan, declare as follows:

1. I am presently employed by Power Engineers Collaborative, a provider of engineering services to Caithness Blythe II as the project engineer for the provision of owners engineer services.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Power Plant Reliability for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at West Allis, WI on June 14, 2005.

Robert E. Gavahan

TRANSMISSION LINE SAFETY AND NUISANCE

TRANSMISSION LINE SAFETY AND NUISANCE

I. Name: Douglas Proctor, P.E.

II. Purpose:

My testimony addresses the Transmission Line Safety and Nuisance issues associated with the construction and operation of the Blythe Energy Project, Phase II (BEP II).

III. Qualifications:

I am a California registered electrical engineer with D. Proctor Engineering, Inc.. I have 38 years experience in Transmission System Engineering and Planning. I have prepared the design layout of the 500-kV transmission tie line between the Integration Switchyard and Buck Switchyard. My qualifications are detailed in the resume contained in Appendix A of this testimony.

IV. To the best of my knowledge all referenced documents and all of the facts contained in this testimony are true and correct. To the extent this testimony contains opinions, such opinions are my own. I make these statements and provide these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

V. Summary:

I have reviewed the FSA and agree with the analysis, conclusions and Conditions of Certification. I have concluded that construction and operation of the transmission facilities associated with the BEP II will comply with all applicable LORS, and will not result in significant direct or cumulative transmission line safety and nuisance impacts.

STATE OF CALIFORNIA
Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

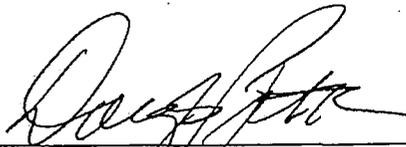
Application for Certification for the
Blythe Energy Project, Phase II

DECLARATION OF DOUGLAS
PROCTOR

I, **DOUGLAS PROCTOR**, declare as follows:

1. I am presently employed by D. Proctor Engineering, Inc. as president and chief engineer.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Transmission Line Safety and Nuisance for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at Sacramento, California on July 14, 2005.



DOUGLAS PROCTOR

WASTE MANAGEMENT

WASTE MANAGEMENT
Testimony of Thomas Cameron and Robert E. Gavahan

I. Name: Thomas Cameron
Robert E. Gavahan

II. Purpose:

Our testimony addresses the Waste issues related to the construction and operation of the Blythe Energy Project, Phase II (BEP II).

III. Qualifications:

Tom Cameron: I am a Project Manager retained by Caithness Blythe II. I hold a B.S. degree in engineering. I have 25 years experience in the energy field. I am responsible for managing the permitting activities for development of the BEP II. I am a principal and Vice President of Mountain View Power, Inc., LLC, Project Manager of Summit Power NW LLC, and President/Managing Director of Cameron & Associates, a power industry consulting firm. I was Project Director for the Blythe Energy Project and am also currently Project Director for the Summit Westward Project, a 520 MW Combined Cycle facility using the Siemens V84.3a technology; Vice President and Project Manager for the Bennett Mountain Power Plant, a 160 MW Simple Cycle facility using Siemens 501F technology; Vice President and Project Manager for the Lake Side Power Plant, a 535 MW Combined Cycle facility using Siemens 501 F technology. I have held assignments as Project Manager for Siemens Power Corporation in charge of design, procurement, equipment manufacturing, construction, and commissioning of several large gas turbine power projects, including the 520 MW Bridgeport Energy Project, using the Siemens V84.3a technology. This was the first project of its type using the new Siemens technology in the world. During execution of these projects, my responsibilities included project management, cost and schedule control, technical and commercial contract negotiations, selection and coordination of vendors, engineering firms, and erection contractors, supervision of engineering and site staff, preparation of bid specifications, coordination of construction management, startup coordination and customer interfaces. A detailed resume is included in Appendix A.

Robert E. Gavahan: I am a Project Engineer employed by Power Engineers Collaborative, LLC. I hold a B.S. degree in mechanical engineering from the University of Minnesota. I have 15 years experience in the energy field. I am responsible for the plant engineering related to the development of the BEP II. My qualifications are more completely detailed in the resume attached in Appendix A.

IV. To the best of our knowledge all referenced documents and all of the facts contained in this testimony are true and correct. To the extent this testimony contains opinions, such opinions are our own. We make these statements and provide these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

V. Summary:

We have reviewed the Waste Management section of the Final Staff Assessment (FSA) and agree with its conclusions that the BEP II will not create significant adverse waste-related environmental impacts and will comply with all applicable waste laws, ordinances, regulations and standards. We further agree with all Proposed Conditions of Certification contained in the Waste Management section of the FSA except **WASTE-7**. CBII proposed modifications to this condition in its Prehearing Conference statement dated June 24, 2005, to which Staff agreed. The revised **WASTE-7** is reproduced below for the Committee's use.

WASTE-7 The project owner shall determine if the ZLD generated wastes are hazardous or non-hazardous pursuant to Chapter 12, section 66262.11 of Title 22 of the California Code of Regulations. The wastes shall be managed as designated wastes if the wastes are classified as non-hazardous, unless determined otherwise.

Verification: The project owner shall notify the CPM via the ~~monthly~~ **annual** compliance report regarding the classification of the wastes and the treatment/disposal methods utilized ~~consequently~~.

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

DOCKET NO. 02-AFC-1

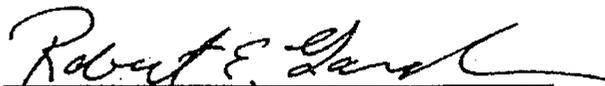
Application for Certification for the
Blythe Energy Project, Phase II

DECLARATION OF
ROBERT E. GAVAHAN

I, Robert Gavahan, declare as follows:

1. I am presently employed by Power Engineers Collaborative, a provider of engineering services to Caithness Blythe II as the project engineer for the provision of owners engineer services.
2. A copy of my professional qualifications and experience is included with the attached testimony in Appendix A, and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Waste Management for the Blythe Energy Project, Phase II (California Energy Commission Docket Number 02-AFC-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at West Allis, WI on June 14, 2005.


Robert E. Gavahan